

The documentation and process conversion measures necessary to comply with this amendment shall be completed by 20 Oct 94.

INCH-POUND

MIL-S-19500/477B
AMENDMENT 2
20 July 1994

MILITARY SPECIFICATION

SEMICONDUCTOR DEVICE, DIODE, SILICON, FAST RECOVERY, POWER RECTIFIER,
TYPES 1N5802, 1N5804, 1N5806, 1N5807, 1N5809, AND 1N5811,
1N5802US, 1N5804US, 1N5806US, 1N5807US, 1N5809US, AND 1N5811US
JAN, JANTX, JANTXV, JANS, AND JANC

This amendment forms a part of MIL-S-19500/477B, dated 25 January 1993, and is approved for use by all Departments and Agencies of the Department of Defense.

The documentation and process conversion measures necessary to comply with revision B, dated 25 January 1993 for group E, table II shall be 25 January 1994.

PAGE 1

1.3.1, T_{STG} , delete "+200°C" and substitute "+175°C".

1.3.2, in the I_{O1} column, add "LO = .375" after $T_L = +75^\circ\text{C}$. On the last column, delete " $R_{\theta HC}$ " and substitute " $R_{\theta JEC}$ ". Footnote 1, delete " T_C " and substitute " T_{EC} ", footnotes 3 and 5, delete " $R_{\theta TC}$ " and substitute " T_L ".

PAGE 2

3.2, add the following abbreviations

"EC End cap.

$I_{(BR)}$ Current for testing breakdown voltage."

PAGE 4

4.3.1.1b, second line, delete " $V_{RWM} = \text{rated}$ " and substitute " $V_R = V_{RWM} \text{ rated}$ ".

PAGE 5

4.4.3.1c, third line, delete " $T_A = \text{room ambient as defined in the general requirements of paragraph 4.5 of MIL-STD-750.}$ "

* 4.5.1, fourth sentence, delete "maximum limit for $R_{\theta JL}$ or $R_{\theta JE}$ under these test conditions shall be as specified in paragraph 1.3.2" and substitute "maximum limit for $R_{\theta JL}$ or $R_{\theta JEC}$ under these test conditions shall be as specified in 1.3.2". (Change from amendment 1.)

The attached insertable replacement pages listed below are replacements for stipulated pages. When the new pages have been entered in the document, insert the amendment as the cover sheet to the specification.

Replacement page

Pages replaced

13
14

Reprinted without change
14

AMSC N/A

1 of 2

FSC 5961

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-S-19500/477B
AMENDMENT 2

PAGE 7

TABLE I, subgroup 2, breakdown voltage, condition column, delete " I_R " and substitute " $I_{(BR)}$ ".

PAGE 8

TABLE I, subgroup 3, breakdown voltage, condition column, delete " I_R " and substitute " $I_{(BR)}$ ".

PAGE 9

TABLE I, subgroup 4, forward recovery time, condition column, delete " $t_r = 8$ ns measured to $1.1 \times V_f$ " and substitute " $t_p \geq 20$ ns, $t_r = 8$ ns; the t_{fr} test is measured at $V_{FR} = 1.1 \times V_F$."

Delete "(pk)" in same column (2 places).

TABLE II, inspection column, delete "1/". In subgroup 2, blocking life, condition column, delete "VR dc = 0.8 - 0.85%" and substitute " V_R dc = 80 - 85 percent".

PAGE 11

* Dimensions table for part numbers 1N5807, 1N5809, and 1N5811, symbol column, delete $\phi 8$ row and substitute the following:

| | | | | | |
|----------|------|------|------|------|---|
| $\phi 8$ | .115 | .165 | 2.92 | 4.19 | 4 |
|----------|------|------|------|------|---|

PAGE 15

4.5.2, last line, delete "is" after limit and substitute "shall".

6.3, delete "14522" in the table and substitute "14552".

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

CONCLUDING MATERIAL

Custodians:

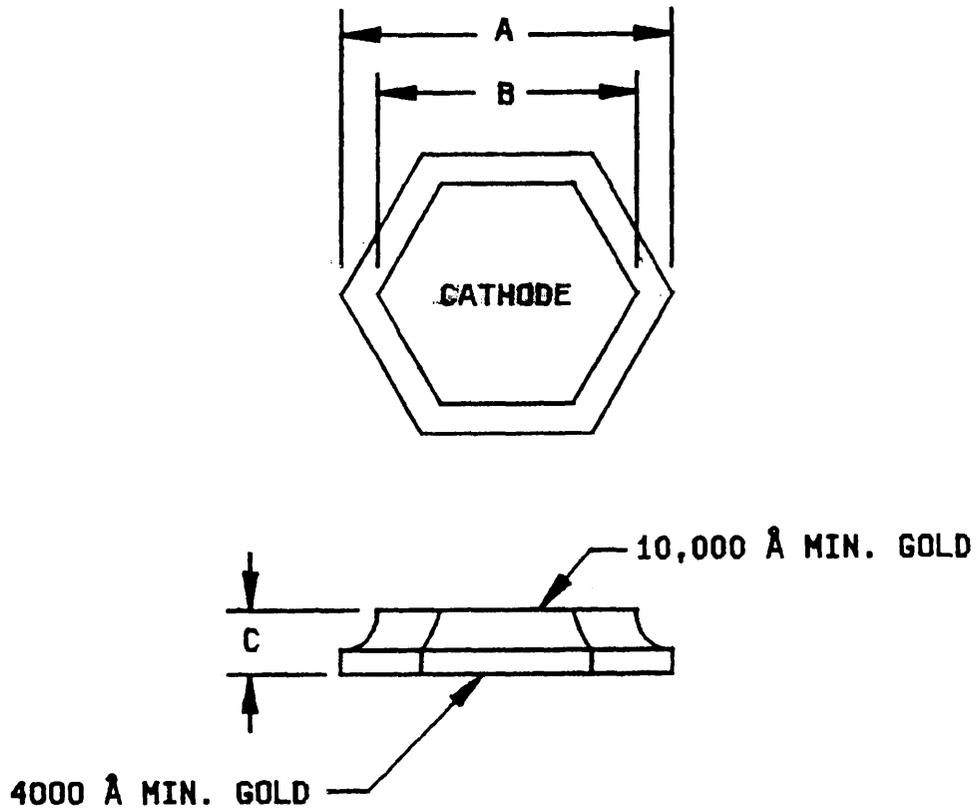
Army - ER
Navy - EC
Air Force - 17
NASA - NA

Preparing activity:
DLA - ES

(Project 5961-1670)

Review activities:

Army - AR, AV, MI, SM
Navy - AS, CG, MC
Air Force - 19, 85, 99



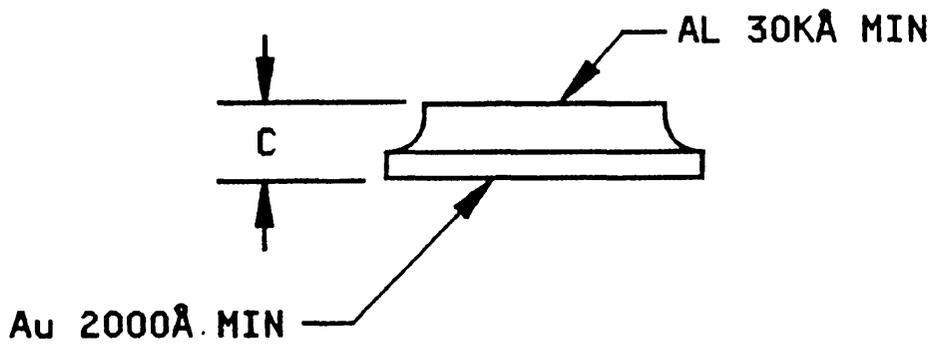
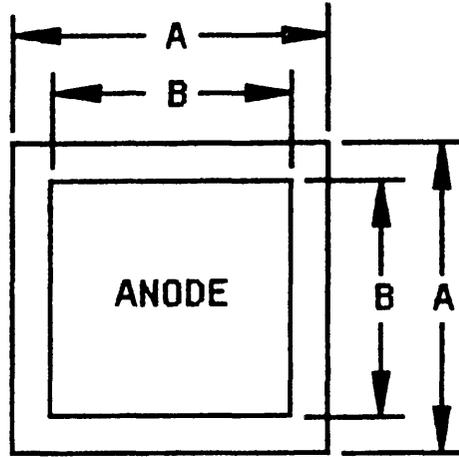
| Symbol | Dimensions | | | |
|--------|-------------|------|--------|------|
| | Millimeters | | Inches | |
| | Min | Max | Min | Max |
| A | 1.19 | 1.35 | .047 | .053 |
| B | 0.84 | 0.94 | .033 | .037 |
| C | 0.18 | 0.28 | .007 | .011 |

1N5802, 1N5804, 1N5806

| Symbol | Dimensions | | | |
|--------|-------------|------|--------|------|
| | Millimeters | | Inches | |
| | Min | Max | Min | Max |
| A | 2.16 | 2.31 | .085 | .091 |
| B | 1.83 | 1.93 | .072 | .076 |
| C | 0.18 | 0.28 | .007 | .011 |

1N5807, 1N5809, 1N5811

FIGURE 4. JANC (A-version) die dimensions.



| Symbol | Dimensions | | | |
|--------|-------------|------|--------|------|
| | Millimeters | | Inches | |
| | Min | Max | Min | Max |
| A | 0.79 | 0.94 | .031 | .037 |
| B | 0.43 | 0.58 | .017 | .023 |
| C | 0.20 | 0.30 | .008 | .012 |

1N5802, 1N5804, 1N5806

| Symbol | Dimensions | | | |
|--------|-------------|------|--------|------|
| | Millimeters | | Inches | |
| | Min | Max | Min | Max |
| A | 1.57 | 1.73 | .062 | .068 |
| B | 1.27 | 1.42 | .050 | .056 |
| C | 0.20 | 0.30 | .008 | .012 |

1N5807, 1N5809, 1N5811

FIGURE 5. JANC (B-version) die dimensions.